1832. Codorus Iron Works. 1892.

BAUGHER, KURTZ & STEWART,

PROPRIETORS,

YORK, PENN'A, U. S. A.,

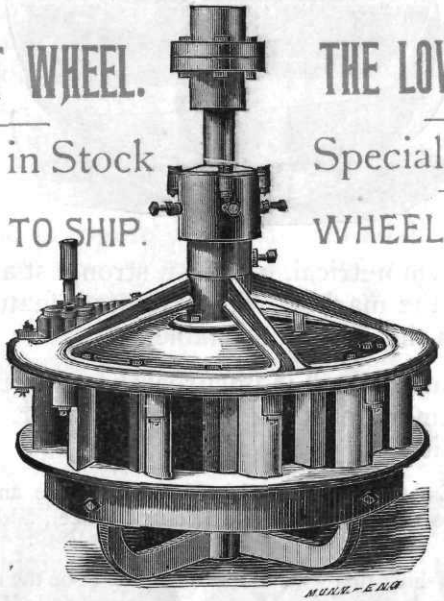
Iron and Brass Founders, Machinists and Tanners,

MANUFACTURERS OF

THE BEST WHEEL. THE LOWEST PRICE.

Wheels in Stock READY TO SHIP.

Special Discounts —FOR— WHEELS ON HAND.



THE RECHARD TURBINE WATER WHEEL,

THE YORK BARK MILL,

THE YORK CORN BREAKER,

POWDER MACHINERY,

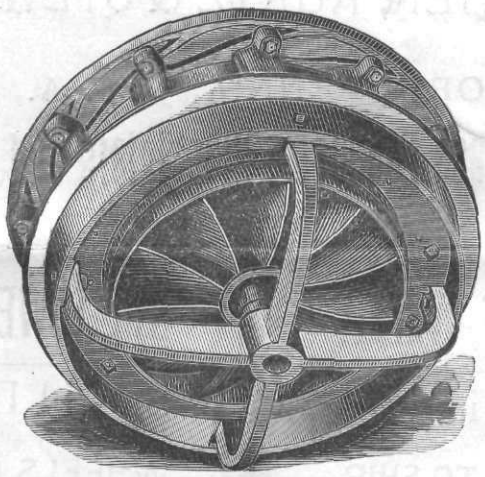
Mill Gearing AND Mill Machinery,

SMALL CAR WHEELS, &c., &c.

Send for Large Illustrated Catalogue—Free.

THE RECHARD TURBINE WATER WHEEL.

This cut represents the Wheel



turned on its side showing the bottom.

The most symmetrical, heaviest, strongest and most durable wheel in the market, with patented features and yet sold as low as the most reasonable.

The Rechard Wheel is unsurpassed at part gate. Read what James Emerson of the Holyoke Water Power Company, says of it.

Mr. James Emerson, who conducted the Turbine and Dynamic Experiments, in reporting the test of the Rechard Wheel, adds the following note :

"The results show this wheel (the Rechard) to be the most economical in the use of water at about three-fourth discharge, and Mr. Baugher takes the very novel course of tabling the capacity of his wheel at this point, thus insuring the purchaser not only the full power represented in the table, but a surplus for emergencies."

Mr. Theo. G. Ellis, of Hartford, Conn., Civil Engineer, and one of the engineers of the Turbine test of the Holyoke Water Power Company, in his report to the company, says :

"In the practical use of Turbines for power, it is rarely the case that a wheel is put in of the exact power required. A margin must be left for an excess of power to meet emergencies, so that a larger wheel is generally purchased than would suffice to meet present requirements. For this reason it is not the wheel which gives the highest percentage

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of efficiency at "full gate" that is really the best wheel. There can be no point fixed at which any wheels should be compared, but it is thought that perhaps three-quarters gate is about the average point at which wheels are used."

In this article Mr. Ellis expresses his ideas in such plain and forcible language that every one who will can understand. If the Rechard Wheel had been made by Mr. Ellis' instruction, in principle it would be about what it is now, and upon proper examination any one who is acquainted with Turbine wheels and their use, will see that his theory is correct.

The importance of a part-gate wheel should command the attention of all users of water power—especially where streams are variable. A wheel that gives good percentage at part gate is the most profitable. In case of back water the full wheel can be used and derive the same power. When the water is slack and down to one-half the average supply, a good part-gate wheel can run all day, while others must shut down every few hours to accumulate water. This feature is especially valuable in woolen and cotton mills and in all factories where the power is variable and the motion required regular. A wheel that gives the highest results at part-gate is easier regulated, and where water is valuable the saving will be immense.

Durability of Turbine Wheels is another point which is of great importance, and should be treated with much consideration. There are a great many wheels built with a view of only high percentage and small cost. They may work well for a short time, but will soon give way in one place or another ; they will soon lose power and will be a constant annoyance to the user as long as used, and will not only entail endless repair bills, but a heavy loss of time. We think we could have no trouble in showing to any unbiased miller or millwright, at least five years more service in the Rechard Wheel than any other pivot gate wheel in the market. It is, however, not a *"small cost"* wheel. We have built wheels, the first cost of which was much less than that of the Rechard, but we consider the injury which a business raputation sustains through manufacturing a cheap and lightly constructed wheel, will largely exceed the difference in cost.

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As a further evidence of the qualities of the Rechard Wheel, and the satisfaction it gives in practical use, we give a few testimonials from parties who are using it; men who are practical, and whose opinions deserve the highest respect.

—o—

TESTIMONIALS.

A 54 inch Wheel under 7 Feet Head.

WILLIAMSPORT, MD., February 14, 1883.

George F. Baugher Estate.

DEAR SIR:—We started your 54 inch Rechard water wheel on 30th November last and must say it has given entire satisfaction up to this time, and feel quite sure it will continue to do so. We run three pairs of burrs at the same time, one 4½, one 4 feet, and one 30 inch; also cleaning machines and all the machinery in the mill with it, and do not use more than ½ gate. We have no idea what the wheel would do from the fact that we haven't machinery enough to test the strength. It comes up to all you claim for it, and we can cheerfully recommend it to any one wishing a water wheel, as being, in our opinion, one of the best wheels made. Our head is 7 feet.

Yours, very truly,

LUCAS & JOHNSON.

—o—

A 30 inch Wheel under 6½ Feet Head.

A 44 inch Wheel under 4½ Feet Head.

NEWVILLE, PA., March 6, 1883.

George F. Baugher Estate.

DEAR SIR:—Yours came to hand in reference to 30 inch Rechard Water Wheel. In reply would say I have been using it since last fall. It is giving power fully up to what is recommended, doing one-third more work than the wheel thrown out—6½ feet head—no trouble with back water at this place.

JOHN HURSH.

The 44 inch wheel put in at Mount Vernon Mill, under 4½ feet head, is giving good satisfaction, giving marked increased power over the one thrown out, using about ¾ gate. At this point we are troubled with back water in time of a freshet, but wheel works well.

Yours, &c.,

J. B. HURSH.

—o—

A 54 inch Wheel under 10 Feet Head.

WEST WATERVILLE, ME., January 5, 1883.

J. E. Ladd, Esq., Gardener, Me.

DEAR SIR:—We cheerfully respond to your inquiries of this date in relation to the 54 inch "Rechard" Water Wheel, that you put in for us in December, 1881. It has now been running over one year, and with entire

satisfaction. It is driving all our machinery—nine large trip hammers and three small ones; eight large grind stones, some of them weighing over three tons; twelve polishing wheels, blower, shears, and other lighter machinery. The wheel is running under about ten feet working head of water and is giving us an EXCESS of power. *It is a very strong made wheel; none more so.* We believe, taking into consideration the power of the wheel, economy of water, durability and cost, that there is, to *say the least*, no better water wheel in the market. EMERSON, STEVENS & CO.

———o———

2—54 inch Wheels under 6 Feet Head. The Part Gate Feature Strongly Recommended.

GARFIELD MILLS, HENRY CLAY P. O., DEL., Feb. 28, 1883.

George F. Baugher Estate, York, Pa.:

Your letter of 8th instant in reference to the Rechard Wheels, put in this mill by Messrs. Du Pont, last summer, came to hand some days since. These are two 54 inch Rechard wheels, running under a 6 feet head. We require in the neighborhood of 60 Horse-Power and these wheels run all our machinery at just ¾ gate. *We like the part gate feature of these wheels very much, in fact we may say it was one of the points that gave us a preference for the Rechard over any other wheel; and we have never regretted our choice.* In back water—and we have had a good deal this month—your wheels acted admirably, the governor opening the gates ⅞ or all open with 18 inches to 2 feet of back water. These wheels are controlled by a good governor and we have a good steady power all the time. We think your wheels are particularly well and substantially built and have no doubt will last a generation. We think the wheels are fully up to representations—we like them very much and cheerfully recommend them to any parties wanting a good wheel or wheels. Yours truly,

JACOB BARLOW,
Per H. G. THATCHER, Att'y.

P. S.—The above mills are located near Wilmington, Del., and are owned by I. E. Du Pont & Co., of that place, who have since bought Seven more Rechard Wheels.

BAUGHER, KURTZ & STEWART.

———o———

SHIPPENSBURG, PA., January 7th, 1890.

Baugher, Kurtz & Stewart:

The 21 inch Rechard turbine water wheel we bought of you last fall is giving the best of satisfaction. If I had use for 50 wheels I would use no other but the Rechard turbine water wheel.

Your humble servant, J. L. METCALF,
Superintendent of the Metcalf Co.

———o———

A 15 inch Wheel under 18 Feet Head.

RISING SUN, MD., January 5th, 1890.

Messrs. Baugher, Kurtz & Stewart, York, Pa.:

GENTLEMEN:—Your favor of the 31st of December is just received and its contents noted. The little wheel you furnished Smith & Bros. is working nicely. It is operating under a working head of 18 feet and at a half

gate it drives a pair of heavy chacers up to 26 revolutions per minute. It took about ⅔ gate on a 20 inch wheel that they had working on the same head to do what your 15 inch is doing with ½ gate. This is more than I expected of it, but it speaks for itself.

Hoping you a prosperous year's business,

I remain, yours truly,

JOHN A. HUNTER.

———o———

EAST BERLIN, PA., January 16th, 1891.

Messrs. Baugher, Kurtz & Stewart, York, Pa.:

GENTLEMEN:—It affords me great pleasure to add my testimony to the many good qualities of the Rechard Turbine Water Wheel. I have been millwrighting over twenty-five years and handled a great many water wheels during that time. During the last nine years I have placed in mills between twenty-five and thirty of the Rechard wheels and they have given entire satisfaction in every case. The wheel is strong and durable and well fit up, and the part gate feature for which this wheel is especially noted, and which I consider indispensable in variable streams, makes it preferable to any wheel I know. During the last year I purchased a mill for myself which I remodeled all through, and the last Rechard wheel I placed, I placed for myself into this mill, and if I needed any more I would have no other.

Respectfully yours, &c., WM. B. FEISER.

———o———

A 24 inch Wheel under 9 Feet Head.
A 18 inch Wheel under 13 Feet Head.

YOCUMTOWN, YORK CO., April 6th, 1891.

Baugher, Kurtz & Stewart, York, Pa.:

Yours bearing date April 15th is received. In reply would say the 24 inch wheel, I bought from you in 1887, I have under 9 feet head on half gate. It runs a chopper and circular saw. It does all it was claimed to do; I think there is no better.

I also use one of your 18 inch wheels in my other mill under 13 feet head on half gate. I grind 5 bushels of wheat per hour. It was bought by Mr. Feiser for Mr. Fetrow. I think these wheels can't be beat to make power. The 24 inch wheel chopped 20 bushels per hour when it stood in back water 4 feet deep. You can use my name if you see fit, for these are facts.

R. C. WENTZ.

———o———

A 24 inch Wheel under 12 Feet Head.

WEST LEEDS, ME., May 8th, 1891.

Messrs. Baugher, Kurtz & Stewart, York, Pa.:

GENTLEMEN:—The 24 inch Rechard Wheel I bought of your Mr. J. E. Ladd, of Gardner, in July, 1887, has run under 12 feet head about every working day since it was set that fall; besides running 2 or 3 months every spring nights without paying out 25 cents expenses on the wheel.

This wheel is running to day, one 52 inch and one 14 inch Circular Saw, sawing brick squares, one 36 inch Cut-off Saw, 2 King Dowel Machines, and one 30 inch Sturtevant Blower. All the above machines are running at high speed with good results.

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I have a 24 inch Chese wheel set under same head and belted on to same line of shafting with equal as good a chance as the Rechard that I use with the Rechard when we run shingle machine or planer. The Rechard wheel will give me ⅓ more power than the Chese.

Very Truly Yours,

R. E. SWAIN.

—o—

2—36 inch Wheels under 10 Feet Head.

WILTON, ME., May 5, 1891.

Messrs. Baugher, Kurtz & Stewart:

I bought two 3 feet water wheels of you in 1886, and have used them about all the time since. We think they are a very good wheel, especially with part gate. We have 10 feet head. One wheel we use for board saw. I think with fair logs we can cut 1,000 feet per hour. The other we use for turning shovel blocks and shingle sawing. I would recommend your wheels to any one. Yours truly,

J. O. LEGROE.

—o—

A 15 inch Wheel under 20 Feet Head.

CONOWINGO, CECIL CO., MD., 4th M., 27, 1891.

Messrs. Baugher, Kurtz & Stewart:

GENTLEMEN:—We have been using one of your 15 inch Rechard Turbine Water Wheels under 20 feet head, driving part of our Flint Mill, and it has given perfect satisfaction, developing more power than we anticipated at part gate, and comes up fully to your guarantee in every respect.

Yours Truly,

B. G. & J. SMITH,

Per P.

—o—

A 40 inch Wheel under 20 Feet Head.

W. MONMOUTH, ME., May 27th, 1891.

Baugher, Kurtz & Stewart, York, Pa.:

DEAR SIRS:—In reply to your letter about our 40 inch wheel, would say it is giving perfect satisfaction. We bought it in December, 1887, and are using it under a 15 feet head, and are running our Axe shop with one-half gate, and the speed is so steady that we do not use any regulator. We think, taking everything into consideration, that your wheel can't be beat.

Truly Yours,

EMERY WATERHOUSE & CO.,

Per H. LINDLAY, Sup't.

—o—

2—54 inch Wheels. 1—18 inch Wheel. 1—11 inch Wheel.

WILMINGTON, DEL., January 8th, 1883.

George F. Baugher's Estate:

DEAR SIR:—The two 54 inch wheels, put in for our tenants last summer are doing well. They say they are running as follows: One Taylor & Lung cotten opener, one do. beater spreader, one do. beater finisher, two sections Foss and Pevery 36 inch cards, 6 cards to a section with two R. Way heads; one 5 delivery Mason drawing frame, one Platt slubber, 52 spindles; one Platt intermediate, 106 spindles, two speeders, 104 spin-

dles each ; also, one elevator from first to second story of mill. In lower story of mill 11 Excelsior spinning frames, 204 8 oz. spindles to each frame running 6,800 revolutions of spindles per minute ; two upright spoolers, two Draper twisters, Sawyer spindle, 440 spindles, in all running 6,000 revolutions per minute ; also, two warping mills, and pump for feeding boiler. When all the machinery is running the gates are about ¾. The wheels are very substantially made and nicely fitted up, and their motion is steady and regular. The governor works the gates well though geared too slow for perfect running. Our observation leads us to believe that the wheels run rather over their tabled speed. During the flood we had in the creek, two weeks since, when we had perhaps two feet of back water, the wheels gave as much power at ¾ as they did before at ⅝ gate. They ran the whole mill at a little over ⅞ gate. This seems to indicate that there might be 10 to 15 horse power in the wheels at full gate over what they gave at ¾ gate. We are well satisfied with the water wheels.

The above is what our tenants say in regard to the Rechard wheel. In regard to the 18 inch and 11 inch wheels I will give my testimony covering them. The 11 inch wheel is running under 9 feet head and is never used at more than ⅜ gate, so no opinion can be formed in regard to its performance, except that it runs well and uses little water. In reference to the 18 inch, however, I would say that it is doing that same work at nearly full gate that a 15 inch Victor formerly did at about ¾ gate and using less water. The head being 18 feet, it is far more durable than the Victor, *which wore out the gate pinion every three months by the tremble and lack* of balance.

Yours truly,

FRANCIS G. DU PONT.

P. S.—The two 54 inch Rechard wheels are running under from 5½ to 6 feet head.

NOTE.—Messrs. Du Pont & Co., have since purchased five more Rechard Wheels, making nine wheels in all.

BAUGHER, KURTZ & STEWART.

———o———

OFFICE OF THE BILLMEYER & SMALL CO.,
YORK, PA., December 24, 1880.

Mr. George F. Baugher.

MY DEAR SIR :—The Rechard Turbine Water Wheel, which you have put into my Flouring Mill, has and is giving the very best satisfaction. I have had several other kinds of wheels, but none gave the satisfaction that your Rechard wheel does. Half-gate gives as much power as whole gate of those we have tried, and when we have plenty of water we can put on whole gate and it gives power in proportion. We have no trouble with clogging. I would have no other wheel. I intend to take out the other one I have in yet and replace it with another one of yours.

Yours Truly,

JOHN H. SMALL.

NOTE.—The above is an 18 inch wheel, working under 16 feet head. He has since purchased two more wheels.

BAUGHER, KURTZ & STEWART.

———o———

STEWARTSTOWN, PA., April 20, 1881.

Mr. George F. Baugher, York, Pa.

DEAR SIR :—I have been using your 15 inch Rechard Turbine Water Wheel for four months, and I am highly delighted with it. It is working

under 14 feet head, and I grind regularly from 6 to 8 bushels of wheat per hour with a little over half gate, and chop from 10 to 20 bushels per hour. I don't know how much I could do with full gate, as I have not yet tried it at full gate. I had intended when I built the mill last Fall to put in one new over-shot wheel, and have had a good deal of the work done, but since running your wheel I countermanded the order for the overshot, and you will please make me another 15 inch Rechard wheel like the first one as soon as you can. Yours, &c.,

JACOB GROVE, (of J.)

———o———

BEAVER CREEK, MD., Feb. 27, 1882.

George F. Baugher, Esq., York, Pa.

DEAR SIR:—The two Rechard Turbine Water Wheels I purchased of you last Summer gave entire satisfaction. With the 27 inch wheel, under 10 feet head, I am able to run two Burrs, Bolts, Purifier, Smutter, Separator, &c.,—all the machinery in my flouring mill. The 21 inch wheel under 10 feet head, which I use to run chopping stones, gives me all the power required at half to three-quarters gate. Before I put in the Rechard wheels I had two overshot wheels 8 feet in diameter. I think these wheels give much more power, especially when the water is strong. The gates close up tightly and are not hard to open and shut. To any one desirous of purchasing wheels I would recommend the Rechard.

Yours Respectfully, P. R. DOUB.

———o———

RISING SUN, MD., 3rd Mo., 16th, 1882.

G. F. Baugher, York, Pa.

DEAR SIR:—Mr. Levis has sent me a certificate in reference to how his wheel, the Rechard, is work. It is giving entire satisfaction in every respect, He says the wheel is so far beyond his expectations, that he is not gifted with language to do justice to its merits. Enclosed you find Mr. Levis' certificate of March 9th. Yours Truly,

JOHN A. HUNTER.

———o———

A 27 inch Wheel under 12 Feet Head.

LOCUST GROVE ROLLER MILLS,
HELLAM, PA., April 9th, 1892.

Messrs. Baugher, Kurtz & Stewart, York, Pa.

GENTLEMEN:—Your letter of March 15th, in reference to the Rechard Water Wheel purchased from you a few years ago is received. In reply I would say that the wheel is a 27 inch wheel under 12 feet head and at three-fourth gate, furnishes all the power for my 60 barrel mill. The wheel is heavy and strong and is built as firm and as durable as a rock. I consider it the most economic wheel in the use of water, in the market. It seems to be especially constructed to economize water at part gate and yields a very high percentage when used at even less than half gate.

This part gate feature is something that I would consider indispensable in a water wheel, especially when it is to be used in a stream with variable stages of water.

I am sure I cannot recommend your wheel too highly.

Yours truly, H. S. LIBHART.

Send for Large Illustrated Catalogue—Free.

FIVE FORKS, FRANKLIN CO., PA., April 4, 1892.

Messrs. Baugher, Kurtz & Stewart, York, Pa.

DEAR SIRS:—The Water Wheel I purchased from you last fall through Mr. J. T. Metcalfe, has given general satisfaction; and your three-quarter gate arrangement is a grand improvement.

Yours respectfully, S. S. WINGERT.

—o—

LIME ROCK VALLEY MILLS, YORK SPRINGS, PA., April 7th, 1892.

Messrs. Baugher, Kurtz & Stewart, York, Pa.

GENTLEMEN:—In reply to your letter in reference to my Rechard Turbine Water Wheel, I would say that I bought this wheel in August, 1881, almost eleven years ago, and it has been in constant use during all this time. I find no difference or change in the wheel from long usage, and so far as I can see it is as good as it was when first started. I am satisfied that to-day, which is after almost eleven years use, it comes up to all representations made in your catalogue.

The part gate feature in this wheel is something that I consider indispensable, especially in a stream like mine, in which the stages of water are very variable. It is running under about 17 feet head and in dry seasons I can use it at any gateage down even to less than half gate and get a high percentage of power from the water.

The wheel is compactly built, is very heavy and firm, and runs very steady without a jar or a quiver, and I consider it the most complete and most durable water wheel now in the market.

Yours truly, HENRY TROSTLE.

We have many other testimonials to the same effect but have not the space to print them.

—o—

SPECIAL.

Attention is directed to the fact that the working *Bearings* of the *Gates* of the *Rechard Wheel* are formed of *Brass* or other *non-corrosive metal*, and the *bolts* passing through the *Bearings* of the gates are of a similar *non-corrosive* metal, and will keep the working parts always free from *rust* and *wear*. This is a special feature in this wheel, and is secured by Letters Patent No. 220,034, granted to John S. Rechard, of York, Pennsylvania, on the 30th day of September, 1879, and bought by George F. Baugher, our predecessor in business, on the 6th day of December, 1881, under which we have the whole and exclusive right to manufacture the Rechard Wheel.

Send for Large Illustrated Catalogue—Free.

The York Corn Breaker.

We have been manufacturing this Corn Breaker (or Corn Crusher as it is sometimes called,) for a number of years and we feel safe in saying it is one of the *Best Corn Crushers* now offered to the Public.

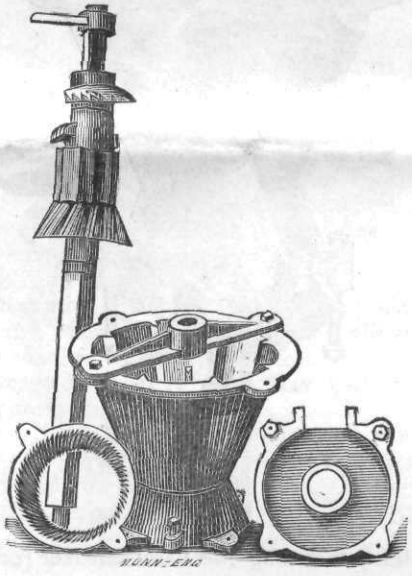
The advantages claimed for it are about as follows: In addition to the conical and perpendicular nuts, it has two or more toothed flanges or saws, one above the other, fastened to the shaft eccentrically on their sockets, and in inclined and reverse positions. They act as crushers and feeders, first cutting or crushing the ears of corn, then pushing or pressing them down between the nut and shell.

The nut is partly conical and partly straight or perpendicular, and is easily replaced in case of wearing out or breaking. The lower or conical part of the *Shell* is double, the inside or toothed part of it can be removed, and in case of a break or wearing out, it can be replaced; in short, any or all the parts which are any way subject to wear can be replaced without any trouble.

It is closed at the bottom; this bottom is flat on its surface with a raised bearing in the centre for the shaft, and the lower part of the nut is provided with a scraper which delivers the crushed corn through a spout at one side.

Send for Large Illustrated Catalogue—Free.

The York Corn Breaker, in parts.



It will crush new corn, when for some other crushers it becomes necessary to dry it before it will pass through.

It can easily be regulated to grind coarse or fine.

It will crush from 30 to 60 bushels of corn per hour, according to the speed, and with less power than any ordinary crusher.

The crushing parts are made of the very hardest and best iron suited to that purpose.

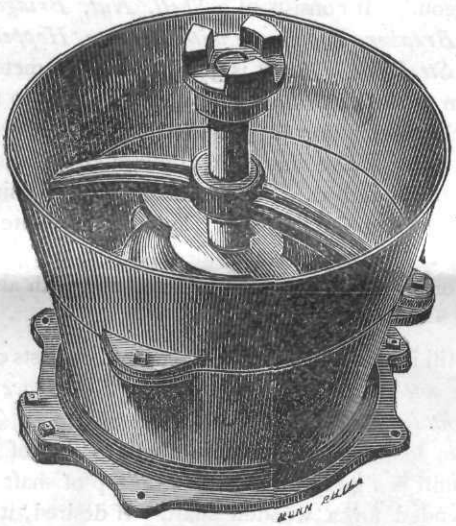
It is complete in itself and may be set on a frame or any convenient place to suit the power, which can be applied at the lower and upper end of the spindle as desired.

PRICE, - - - - - - - - - - - - $28.00.

☞Write for discounts.

Send for Large Illustrated Catalogue—Free.

THE YORK BARK MILL.



Mill Complete.

We are Tanners ourselves and have been, we and our predecessors, for fifty years. We grind from eight to ten tons of Rock Oak or Chestnut Oak Bark every working day, and consequently we know what is a good Bark Mill. We use this Mill ourselves and sell it to Tanners all over the country from Maine to California, to Mexico and South America.

Read the following description of it:

After a number of years' experience by the largest Tanners and Extract Manufacturers with Hemlock and Oak Bark, as well as Manufacturers of Quer Citron, we do not hesitate to say that the YORK BARK MILL is the best now in use for grinding *Fast, Fine and Even.* It grinds damp bark when other mills gum up. It grinds very *regular, avoiding dust and coarse pieces.*

For Grinding Quer Citron and Hemlock Bark it is unsurpassed and is used almost exclusively in Pennsylvania and Maryland. It is heavy and strong and not liable to break. Every part of it is cast solid, and, in case of an accident, break or wear out, any part can easily be replaced.

We manufacture this mill in three different ways. It is adapted to steam or horse power, and is made to run with or against the sun.

Send for Large Illustrated Catalogue—Free.

No. 1 is a *Steam* or *Water Power* Mill, as shown in cut of *mill complete*, containing all the parts as shown in cut of *mill in parts*, (excepting the winged gudgeon.) It consists of a *Shell, Nut, Bridgetree with Steel-lined Step Box, Breaker, Top Brace with Bearing, Hopper, and Wrought-Iron Shaft with Steel Toe.* Shaft is 3⅜ inches in diameter and 37 inches long from bottom of shell, (or floor on which it rests,) to the centre of the coupling and a clutch coupling for 3⅜ shaft. By special order this coupling will be bored so as to receive almost any desired size of shaft into its upper half. The shaft of the mill can also be made of any desired length, if so ordered, by paying the difference of the length at the rate of wrought iron shafting of that size. This mill is intended for steam or water, should run at the rate of 60 or 80 revolutions per minute, and with about eight horse-power will grind a cord of Bark an hour.

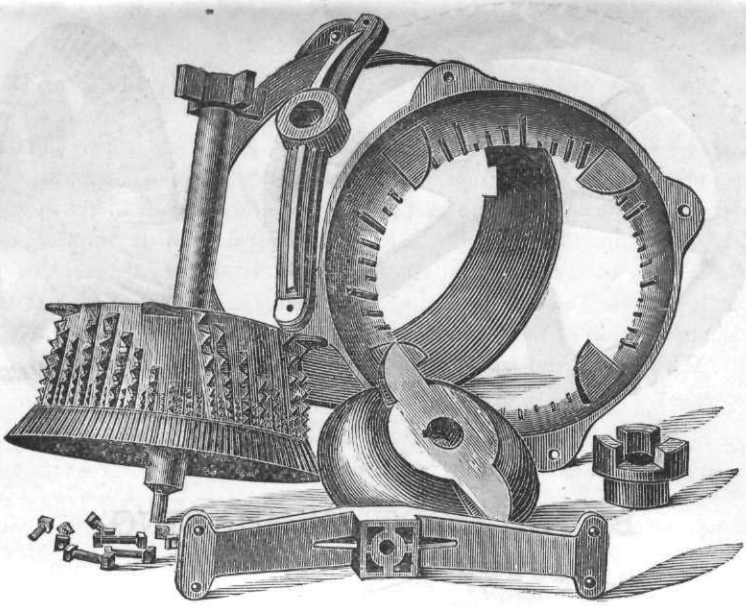
No. 2 is a Mill intended for Horse-Power and consists of a *Shell, Closed Nut, Bridgetree with Steel-lined Step Box, Top Brace* (straight) *with Bearing, Wrought-Iron Shaft with Steel Toe.* Shaft is 2⅜ inches in diameter and 26 inches long from bottom of shell to top of coupling. The coupling in this mill is a gudgeon as shown on top of shaft in cut of *mill in parts*, and is intended for a wooden shaft. If desired, it can also be furnished with clutch coupling to use with an iron shaft in the same manner as Mill No. 1. This mill will grind an amount in proportion to No. 1 mill as the proportion of the revolutions is between the two mills. If the horse walks fast it will grind fast.

No. 3 is also a *Horse-Power* Mill and consists of a *Shell, Cast-Iron Step Box*, and a *Nut;* the nut is provided with a cast-iron gudgeon and the arms in the nut are flat and so arranged as to answer for wings to the gudgeon and to receive a wood shaft. It is shipped in three pieces just as described, no wood work being furnished with any of the mills.

Nos. 1 and 3 are shipped in one part, complete, as described.

Send for Large Illustrated Catalogue—Free.

The York Bark Mill, in parts.



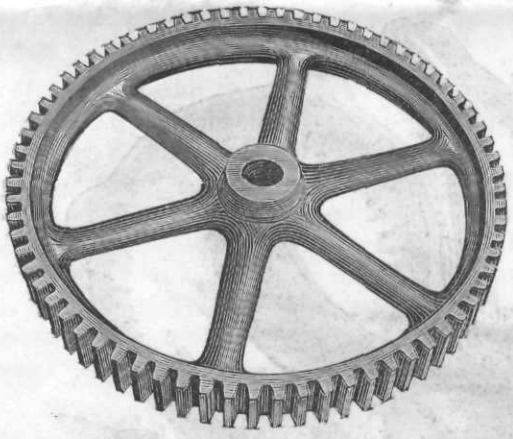
PRICE of No. 1 Mill, Steam or Water Power, 1200 lbs. in weight,...$75.00
" " 2 " Horse " 900 " " ... 60.00
" " 3 " " " 660 " " ... 40.00

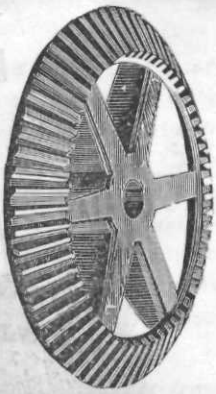
Send for Large Illustrated Catalogue—Free.

Gearing of All Kinds and Sizes,

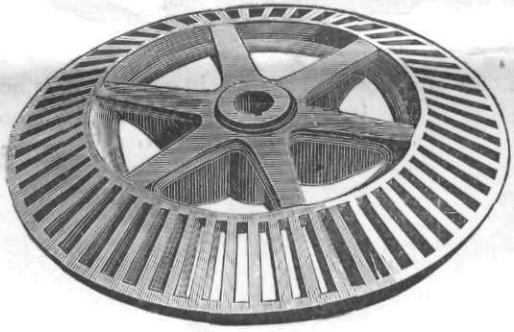
Capable of transmitting from one to 3,000 Horse-Power.

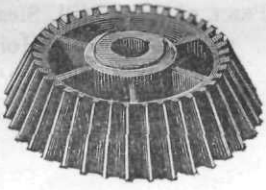
SPUR AND BEVEL GEARING.





BEVEL MORTISE GEARING.





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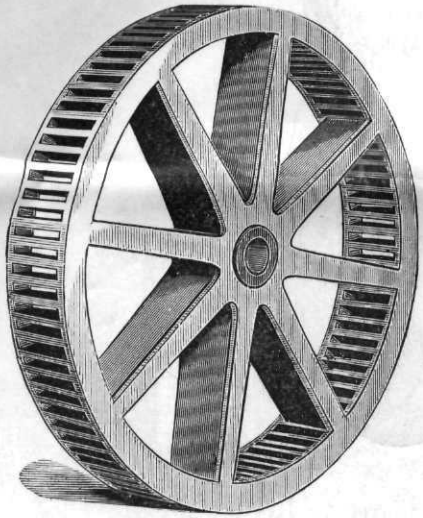
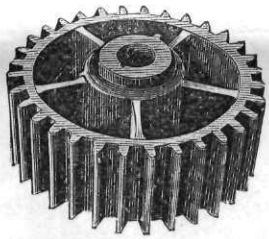
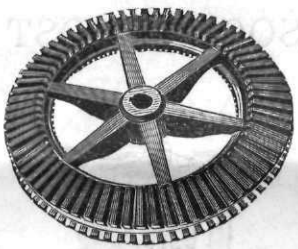




MITERS AND SEGMENTS.



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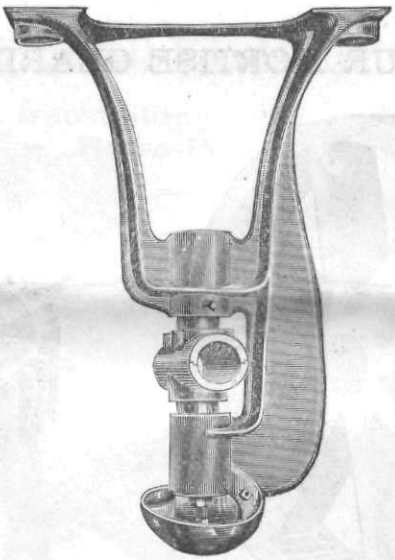
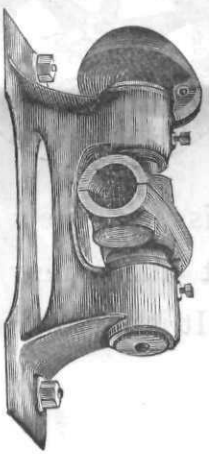


BALL AND SOCKET POST HANGERS.



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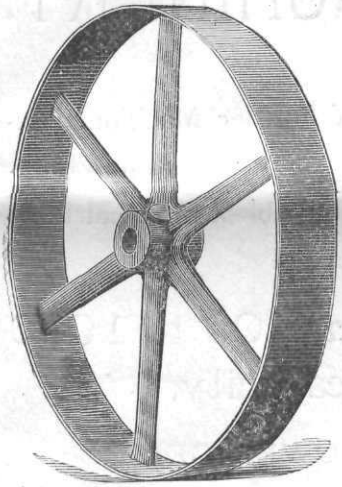

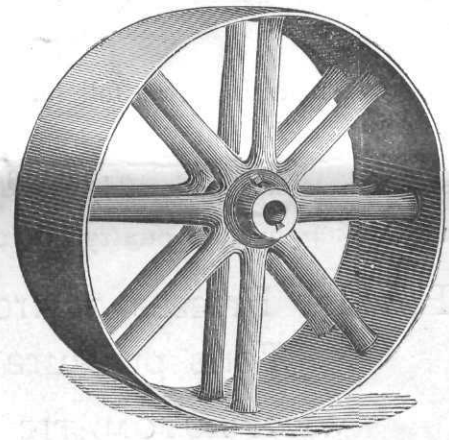

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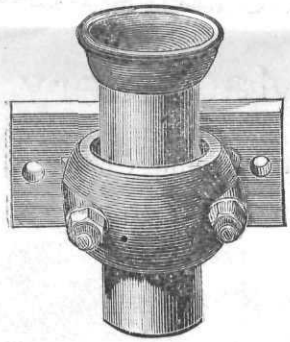

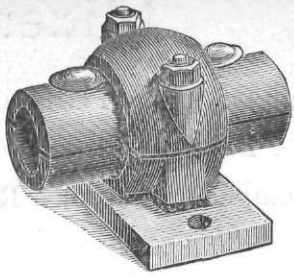

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